AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Cancelled)

2. (Previously Presented) The fully-dense discontinuously-reinforced titanium matrix composite material according to claim 21 is characterized by discontinuous porosity at the density over 98% from the theoretical value.

3. (Previously Presented) The fully-dense discontinuously-reinforced titanium matrix composite material according to claim 21, wherein the matrix alloy is selected from a-titanium alloys, (a+β)-titanium alloys, β-titanium alloys, and titanium aluminide alloys.

4. (Cancelled)

5. (Withdrawn - Currently Amended) A method for manufacturing the fully-dense discontinuously-reinforced titanium matrix composite material according to claim 1[[1-4]], is comprised of the following steps:

a. preparing a basic powdered blend containing the matrix alloy or titanium powders which have a particle size over 20 µ~~lA~~m for 95% of the powder, dispersing ceramic and intermetallic powders, and powders of complex

carbide particles, and carbide-silicide particles that are at least partially soluble in the matrix at the sintering and forging temperatures such as $Ti_4Cr_3C_6$, Ti_3SiC_2, Cr_3C_2, Ti_3AlC_2, Ti_2AlC, Al_4C_3, Al4SiC4, $Al_4Si_2C_5$, Al_8SiC_7, V_2C, (Ti,V)C, VCr_2C_2, and $V_2Cr_4C_3$,

~~a.~~b. preparing the aluminum-vanadium master alloy containing 0.01-5 wt.% of iron,

~~b.~~c. preparing the Al-V-Fe master alloy fine powder having a particle size of 20 1.tm or less,

~~c.~~d. mixing the basic powdered blend (a) with the master alloy powder (c) in the predetermined ratio to obtain a chemical composition of titanium matrix composite material,

~~d.~~e. compacting the powder mixture at room temperature by cold isostatic pressing, die pressing, or direct powder rolling,

f. sintering at the temperature providing at least partial dissolution of dispersing ceramic and/or intermetallic powders,

g. forging at the temperature range of 1500-2300°F, and

h. cooling.

6. (Withdrawn) The method for manufacturing the fully-dense discontinuously-reinforced titanium matrix composite material according to claim 5, wherein the basic powdered blend is prepared in the form of elemental powder blend or combination of elemental powders and prealloyed powders blend.

7. (Withdrawn) The method for manufacturing the fully-dense discontinuously-reinforced titanium matrix composite material according to claim 5, wherein the dispersing ceramic and/or intermetallic powders are selected from the group consisting of TiC, B_4C, SiC, ZrC, TaC, WC, NbC, TiAl, Ti_3Al, $TiAl_3$, $TiAlV_2$, Al_8V_5, and TiCr2.

8. (Withdrawn) The method for manufacturing the fully-dense discontinuously-reinforced titanium matrix composite material according to claim 5, wherein carbon powder is introduced in the basic powder blend.

9. (Withdrawn) The method for manufacturing the fully-dense discontinuously-reinforced titanium matrix composite material according to claim 7, wherein the carbon is in the form of graphite, black carbon, or pyrolytic carbon.

10. (Withdrawn) The method for manufacturing the fully-dense discontinuously-reinforced titanium matrix composite material according to claim 5, wherein the sintering is carried out at the temperature of 2300°F (1260°C) and higher to provide complete densification and provide oversaturated solid solution that will result in the formation of coherent reinforced carbide and/or intermetallic particles in the matrix alloy during the cooling.

11. (Withdrawn) The method for manufacturing the fully-dense discontinuously-reinforced titanium matrix composite material according to claim 5, wherein hot pressing, hot isostatic pressing, or hot rolling are carried out after sintering in any combination.

12. (Withdrawn) The method for manufacturing the fully-dense discontinuously-reinforced titanium matrix composite material according to claim 5, wherein the resulting composite material is characterized by density over 98% of theoretical value and discontinued porosity after sintering that makes it possible forging, hot pressing, hot isostatic pressing, or hot rolling without any special protective coating, encapsulating, or canning.

13. (Withdrawn) Use of near-full density titanium matrix composite material manufactured according to claim 5 in the as-sintered state characterized by density over 98% of theoretical value and discontinued porosity.

14. (Withdrawn) Use of fully-dense titanium matrix composite material manufactured according to claim 5 in the near-net shape state after forging, hot pressing, hot isostatic pressing, or hot rolling performed without any special protective coating, encapsulating, or canning, and without finishing of final product by machining and/or chemical milling.

15. (Cancelled)

16. (Cancelled)

17. (Previously Presented) The fully-dense discontinuously-reinforced titanium matrix composite material according to claim 21, wherein graphite hard particles and hard particles of silicon carbide SiC are added in amount of 40% or less of the total amount of said hard particles dispersed in the titanium matrix.

18. (Cancelled)

19. (Previously Presented) The fully-dense discontinuously-reinforced titanium matrix composite material according to claim 21, wherein said complex carbide-silicide and carbide-aluminide hard particles are dispersed in the matrix in the amount of about 20% by volume and at least partially soluble in the matrix at sintering and forging temperatures.

20. (Cancelled)

21. (Currently Amended) A fully-dense discontinuously-reinforced titanium matrix composite material to provide improved mechanical characteristics such as toughness, flexure strength, impact strength, and wear resistance, as well as essentially uniform structure of flat and shaped articles, comprising

(a) a matrix of titanium or titanium alloy as a major component,

(b) ceramic and/or intermetallic hard particles dispersed in the matrix in the amount ~~of~~ greater than zero, and less than 50% by volume ~~or less~~, which include particles of the compound Al_8V_5 ~~compound~~, and

(c) particles that are complex carbides, ~~carbide- and/or silicide particles~~ that are at least partially soluble in the matrix at the sintering or forging temperatures,

~~such as $Ti_4Cr_3C_6$, Ti_3SiC_2, Cr_3C_2, Ti_3AlC_2, Ti_2AlC, Al_4C_3, Al_4SiC_4, $Al_4Si_2C_5$, Al_8SiC_7, V_2C, (Ti,V)C, VCr_2C_2, and $V_2Cr_4C_3$,~~ or complex silicides that are at least partially soluble in the matrix at the sintering or forging temperatures, or both, wherein

the ceramic and/or intermetallic hard particles dispersed in the matrix are incorporated into the titanium matrix composite during the preparation and before sintering of a basic powdered blend to produce near-full density parts from a titanium matrix composite material that has acceptable mechanical properties without a need for further hot deformation.

22. (Cancelled)

23. (New) The fully-dense discontinuously-reinforced titanium matrix composite material according to claim 21 wherein the complex carbide particles are selected from the group $Ti_4Cr_3C_6$, Ti_3SiC_2, Cr_3C_2, Ti_3AlC_2, Ti_2AlC, Al_4C_3, Al_4SiC_4, $Al_4Si_2C_5$, Al_8SiC_7, V_2C, (Ti,V)C, VCr_2C_2, and $V_2Cr_4C_3$,